

REMARKS

Reconsideration of this application, as amended, is respectfully requested. Claims 1, 15, 37, and 42 have been amended. Support for the present amendments may be found in, for example, paragraphs 45 and 54 of the originally filed specification and, as such, no new matter is being added by any of the present amendments.

Claims 1-5, 7, 8, 15-18, 20-24, 35-40, 42, and 44 are rejected under 35 U.S.C. § 102(e) as being unpatentable over Kochi et al. (US PGPUB 2002/0179812, hereinafter “Kochi”). Claim 1, as amended, includes the element of determining a cross sectional dimension of the intermediate section of the measured structural element by statistically averaging the first and second distances, wherein the cross sectional dimension is located between a first and second traverse section of the measured structural element. Kochi fails to disclose at least this element of claim 1.

Kochi discloses an electron beam device including a shape measuring section that serves “to measure the three-dimensional shape of the specimen 9 on the basis of the three-dimensional images as corrected with the data correcting section 31.” *Kochi*, paragraph 64. The shape measuring section also measures “three-dimensionally the shape of the specimen 9 on the basis of reference mark data contained in the data detected at different tilt angles in the state of differences in distortion and in scale due to the tilt contained in the data detected at different tile angles corrected.” *Id.*, paragraph 23. Thus, the three-dimensional measurements of Kochi are limited to measurements of the relative height or displacement in the z direction of surface features present on a specimen. In contrast, the method of claim 1 requires a determination of a cross sectional dimension that is located between a first and second traverse section of the measured structural element.

Additionally, claim 1 requires determining a cross sectional dimension of the intermediate section of the measured structural element in by statistically averaging the first and second distances. Kochi fails to disclose such a limitation.

Thus, for at least these reasons, Kochi fails to disclose each and every element of claim 1 and, consequently, does not anticipate claim 1. Independent claims 15, 37, and 42 include elements similar to those recited in claim 1 and are not anticipated by Kochi for at least the same reasons as claim 1. Claims 2-5, 7, 8, 16-18, 20-24, 25-40, and 44 depend directly or indirectly

from claims 1, 15, and 42, respectively, and are not anticipated by Kochi at least by virtue of this dependency.

Claims 6, 9-14, 26, and 28 are patentable over Kochi in view of Takane at least because Takane fails to overcome the deficiencies of Kochi

Claims 6, 9-14, 26, and 28 depend directly or indirectly from claims 1 and 15 and are patentable over Kochi for at least the reasons provided above with regard to claims 1 and 15. Takane is cited for providing various features of dependent claims 6, 9-14, 26, and 28 which are not included in Kochi. Whether or not this is true, Takane fails to overcome the above noted deficiencies of Kochi. Therefore, the combination of Kochi and Takane fail to teach or suggest each and every element of claims 6, 9-14, 26, and 28 and as such, claims 6, 9-14, 26, and 28 are patentable over Kochi in view of Takane.

Claims 19 and 41 are patentable over Kochi at least because the knowledge of a person of ordinary skill in the art fails to overcome the deficiencies of Kochi

Claims 19 and 41 depend directly or indirectly from claims 15 and 42 and are patentable over Kochi for at least the reasons provided above with regard to claims 1 and 15. The Office Action states that it would have been obvious to a person of ordinary skill in the art to prevent the electron beam from illuminating the measured structural element as recited in claims 19 and 41. Even if true, the statement in the Office Action still fails to overcome the above noted deficiencies of Kochi. Therefore, claims 19 and 41 are patentable over Kochi.

Claims 27 and 29-32 are patentable over Kochi in view of Muckenhirn at least because Muckenhirn fails to overcome the deficiencies of Kochi

Claims 27 and 29-32 depend directly or indirectly from claim 15 and are patentable over Kochi for at least the reasons provided above with regard to claim 15. Muckenhirn is cited for teaching various features of dependent claims 27 and 29-32. Whether or not this is true, Muckenhirn fails to cure the deficiencies of Kochi with respect to independent claim 15. Therefore, because claims 27 and 29-32 depend from claim 15, the present claims are patentable over Takane in view of Muckenhirn.

For at least the foregoing reasons, the present claims are patentable over the cited references. If there are any additional fees due in connection with this communication, please charge Deposit Account No. 19-3140.

Dated: October 28, 2009

Respectfully submitted,

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